

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-7, 13, 16-18, 20-31, 33, 35, and 37 and amend claims 8, 10-12, 14, and 15. Claims 19, 32, and 34 were cancelled in previous papers. No new matter is believed to be introduced by the aforementioned amendments and new claims. The following listing of claims will replace all prior versions and listings of claims in the application.

1-7. **(Cancelled)**

8. **(Currently Amended)** A long wavelength vertical cavity surface emitting laser comprising:

a substrate;

a first mirror proximate said substrate and having a plurality of layers including at least one pair of layers having a non-oxidized AlGaInAs layer and an oxidized layer, wherein the oxidized layer comprises at least one of oxidized InGaAsP, InAlAs, InAlGaAs, AlAsSb, AlGaAsSb, AlGaPSb or AlPSb;

a cavity proximate to said first mirror;

a second mirror proximate to said cavity, said second mirror comprising a partially oxidized layer for confining current; and

at least two contacts configured to cause current to flow through at least a portion of the vertical cavity surface emitting laser.

9. **(Original)** The laser of claim 8, wherein said first mirror is proximate to an InP substrate.

10. **(Currently Amended)** The laser of claim ~~[[9]]~~ 12, wherein the ~~cavity comprises one or more quantum wells~~ at least one quantum well is configured to emit energy at a wavelength greater than 1200 nm.

11. **(Currently Amended)** The laser of claim ~~[[10]]~~ 8, wherein said second mirror comprises a plurality of layers having at least one InP layer.

12. **(Currently Amended)** The laser of claim ~~[[11]]~~ 8, wherein said cavity has at least one quantum well.

13. **(Cancelled)**
14. **(Currently Amended)** The laser of claim [[13]] 8, further comprising:
a first electrical contact on said second mirror; and
a second electrical contact on the substrate.
15. **(Currently Amended)** The laser of claim [[13]] 8, further comprising:
an intra-cavity contact layer situated between said first mirror and said cavity;
a first contact on said second mirror; and
a second contact on said intra-cavity contact layer.
- 16-35. **(Cancelled)**
36. **(Previously Presented)** The laser of claim 8, wherein the plurality of layers of the first mirror has six or fewer pairs of layers.
37. **(Cancelled)**